

December 10, 2003

To: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572 28 Davis Avenue Poughkeepsie, N.Y. 12603

Subject:

 $\overline{\text{Serial No.}}$  10/661,038 09/12/03

Cheng T. Horng et al.

PROCESS AND STRUCTURE TO FABRICATE SPIN VALVE HEADS FOR ULTRA-HIGH RECORDING DENSITY APPLICATION

## INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56.

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on December 19, 2003.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

- U.S. Patent 6,141,191 to Lee et al., "Spin Valves with Enhanced GMR and Thermal Stability," discloses a spin valve sensor with enhanced GMR effect and improved thermal stability.
- U.S. Patent 6,567,246 to Sakakima et al., "Magnetoresistance Effect Element and Method for Producing the Same,
  and Magnetoresistance Effect Type Head, Magnetic Recording
  Apparatus, and Magnetoresistance Effect Memory Element,"
  discloses a magnetoresistive effect element which produces a
  high level of output to an outside magnetic field in response
  to a change in a magnetoresistance.
- U.S. Patent 6,414,825 to Inoue et al., "Thin Film Device, Thin Film Magnetic Head and Magnetoresistive Element," teaches a method for improving the thermal conductivity and hardness of shield gap films by sputtering BN, SiN and CN layers in the presence of oxygen and Ar.
- U.S. Patent 6,221,508 to Kanbe et al., "Magnetic Recording Media," teaches the use of Ar sputtering with the admixture of small percentages of other gases (including oxygen at approx.

  10%) in forming recording media with reduced grain size for low-noise magnetic recording.

STITCELETY,

Stephen B. Ackerman,

Reg. No. 37761

Doctor Humber (Cptice) Form PTO-1449 10/661,038 HT-03-006 INFORMATION DISCLOSURE CITATION Applicant IN AN APPLICATION FHing De (Use several shouts if necessary) U. S'. PATENT DOCUMENTS Y APPROPULTE DOCUMENT NUMBER HUME CLASS NECLAS 360 360 360 428 FOREIGN PATENT DOCUMENTS Translation DOCUMENT NUMBER DATE CUSS SUBCLASS COUNTRY YES OTHER DOCUMENTS (Including Author, Tibo, Dalo, Porthorn Pages, Elc.)

EXAMINER

2 2 2003

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DATE CONNDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.